

REMARKS

Reconsideration of the application is respectfully requested.

Upon entry of the foregoing amendments, claims 1-82 are pending in the application, with claims 1, 3, 13, 28, 39, 58, 66, and 74 being the independent claims.

Based on the above Amendment and the following Remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

The Office Action on page 2, in section 3, rejects claims 29 and 57 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards the invention. The claims have been amended to be consistent. No inconsistency was found in claim 29. Applicants respectfully request that this rejection be withdrawn.

The Office Action on page 3, in section 4 objects to the drawings as failing to comply with 37 C.F.R. § 1.84(p)(4). Applicant respectfully traverse this rejection. According to 37 C.F.R. § 1.84(p)(4), "the same part of the invention appearing in more than one view of the drawing must always be designated by the same reference character, and the same reference character must never be used to designate different parts." The clients 20, servers 60, and servers 80 as shown in Figure 1 are the same parts, and therefore do not require distinct reference numerals. Applicant therefore respectfully requests that this objection be withdrawn.

The Office Action on pages 3-5, in sections 5-6, rejects claims 1, 2, 58, 60, 62, 66, 68, 70, 74, 76, 78, and 82 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,654,772 to Crow et al. Applicant respectfully traverses this rejection.

Claim 1 recites "a computer readable medium containing **a file for storing** a root storage including a model directory comprising at least one model, wherein said at least one model

comprises a model header." Referring to Figures 3-5, for example, in an exemplary embodiment of the invention, a computer readable medium may contain a file 200 for storing a root storage 210 including a model directory comprising at least one model 310, wherein said at least one model comprises a model header 314.

Accordingly, the claims recite a file format for storing a specific type of data. As is known to one of ordinary skill in the art, a file when used in connection with computer systems is an entity of data available to users of the system that can be manipulated as an entity. For example, a file can be moved from computer to computer, directory to directory, transmitted over a network, etc. A file may be, for example, a Word document, which may be attached to an email and transmitted over a network to a recipient. All of the claims of the present application describe what is in the file and the format of the file.

In contrast, Crow describes the logical layout of a physical disk, such as a hard disk, and does not relate to a file. Crow describes that multiple storage disks may be arranged in a RAID configuration. See col. 3, lines 20-22. Data from the same file may be stored at different locations on the physical disk. Crow proposes a system for laying out the disk. Extents are used to map different segments of a file to different physical disks and partitions therein. This allows information to be inserted into a file without moving the physical location of the file on the disk. See col. 4, lines 9-12 and col. 5, lines 15-35 of Crow.

Consequently, it can be seen that the parts of the disk layout described in Crow are not comprised or contained in a file as is recited in the pending claims. This fundamental difference between the claims and Crow permeates through all of the rejections. A comparison of Crow to the claimed invention may be analogized to a comparison of apples and oranges, simply two unrelated items. Therefore the rejections of the claims should be withdrawn. A more detailed discussion of the rejections follows.

Claim 1 is not anticipated by Crow for at least the following two reasons. First, Crow does not teach or suggest the recited root storage. In applying Crow to claim 1, referring to Figure 5

of Crow, the Office Action aligns the recited root storage with root directory 61, 62. According to Crow, each directory 61 translates abstract file names and directory names to physical addresses of inodes 63, 64, and directory 62, respectively. See, Crow, col. 3, lines 52-55. In contrast, in an exemplary embodiment of the invention, the recited root storage may be the starting point for reading or creating files, and may contain other storages and streams. For example, as defined at, specification page 9, lines 3-5. Such a root storage does not translate abstract file names and directory names to physical addresses of inodes or directories, but instead contains other storages and streams. Hence, claim 1 is not anticipated by Crow because Crow does not teach or suggest the recited root directory.

Second, Crow does not disclose the recited model directory comprising at least one model storage. In applying Crow to claim 1, referring to Figure 5 of Crow, the Office Action also aligns the recited root storage with root directory 61, 62. As noted above, each directory 61 translates abstract file names and directory names to physical addresses of inodes 63, 64, and directory 62, respectively. See, Crow, col. 3, lines 52-55. In contrast, Claim 1 recites "a model directory comprising at least one model storage." The model storage comprises a model header. In an exemplary embodiment of the invention, models may include element lists that comprise element chunks, for example, as defined at specification, page 7, line 1. Further, a model may group related elements for any purpose relevant to an application (e.g., applications that store large quantities of variable-sized data). The purpose of this strict hierarchy (model directory contains model contains element list contains element chunk contains element) is to facilitate efficient loading and more importantly re-saving of individual elements as they change in size without rewriting the entire model. See, e.g., Specification, page 9, lines 24-25. The model header can contain the name and geometric information that may be relevant to know about the model without having to load the model into memory. The inodes and directories taught by Crow are not the recited model and model directory, respectively, because they do not comprise at least one model storage comprising a model header. Crow does not disclose the recited model directory comprising at least one model storage comprising a model header. Hence, claim 1 is not anticipated by Crow because Crow does not disclose the recited model directory comprising at least one model storage.

Claim 2 depends from claim 1 and is allowable for at least the reasons discussed above regarding claim 1.

Furthermore, claim 2 recites “wherein said at least one model storage further comprises at least one element list storage including at least one element chunk stream, wherein said at least one element chunk stream comprises an element chunk header and at least one element associated with said element chunk header.” Claim 2 is also allowable because Crow does not teach or suggest the recited features of claim 2. Referring to Figures 5-7, for example, in an exemplary embodiment of the invention, each of said plurality of models 310 may comprise element list storages 311, 312 containing at least one element chunk 320. Each of the element chunks may comprise an element chunk header 325 and at least one element 330 that may be associated with its respective element chunk header 325. Within an element list storage (e.g., graphic element list 311 and control element list 312), individual elements may be stored in groupings, or element chunks 320. Each element may be given a unique name, for example so that chunks may be determined merely by iterating over the names in the element list. See, e.g., Specification, page 11, lines 3-8.

In applying Crow to claim 2, the Office Action aligns the recited element list storage with inode 63, 64 and the recited element chunk stream with block 80. The Office Action further aligns the recited element chunk header with inode 63, 64 and the recited element with length 3. Applicant respectfully submits that none of these four alignments are proper.

According to Crow, index nodes (inodes) map abstract file segments to physical data blocks. See, Crow, col. 1, lines 28-30. The inodes taught by Crow do not anticipate the recited element list storage because a mapping of file segments to physical data blocks is not a storage for element chunk. Hence, Crow does not teach or suggest the recited element list storage.

Moreover, the blocks 80 of Crow are physical data blocks. See, Crow, col. 3, lines 54-56. The recited element chunk stream is not a physical data block, but instead provides the organizational structure to store elements in groupings. Hence, Crow does not teach or suggest the recited element chunk stream.

Additionally, the index nodes (inodes) of Crow map abstract file segments to physical data blocks. See, Crow, col. 1, lines 28-30. The inodes taught by Crow do not anticipate the recited element chunk header because inodes do not contain information necessary to read the recited elements from the recited element chunk. See, e.g., Specification, page 12, lines 13-15. Hence, Crow does not teach or suggest the recited element chunk header.

Furthermore, according to Crow, length 3, the length field indicates the number of data blocks in the string of data blocks that stores the associated file segment. The length taught by Crow does not anticipate the recited element because elements are discrete objects within a file, and the number of data blocks that it takes to store the element is irrelevant. Hence, Crow does not teach or suggest the recited element. Accordingly, for at least the reasons discussed above, Crow does not teach or suggest the recited features of claim 2.

Claim 58 contains similar features as claim 1 and is allowable for at least similar reasons discussed above with respect to claim 1. Claim 62 depends from claim 58 and is allowable as being dependent from an allowable claim.

Claim 66 contains similar features as claim 1 and is allowable for at least similar reasons discussed above with respect to claim 1. Claims 68 and 70 depend from claim 66 and are allowable as being dependent from an allowable claim.

Claim 74 contains similar features as claim 1 and is allowable for at least similar reasons discussed above with respect to claim 1. . Claims 76 and 78 depend from claim 74 and are allowable as being dependent from an allowable claim.

Claim 82 depends from claim 3 [**claim 3 is not rejected under 102(e), therefore this rejection is improper**].

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action on pages 5-14, in sections 7-8, rejects claims 3-5, 7, 15, 18, 27-29, 38-39, 43-44, 48-49, 53, 56-57, 59, 61, 67, 69, 75, and 77 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 5,506,983 to Atkinson et al. Applicant respectfully traverses this rejection.

Independent claims 3, 28, 39, 58, 66 and 74 contain similar recitations as claim 1. As discussed above, Crow does not teach or suggest the recited features of claim 1. Atkinson does not cure these deficiencies. Instead, Atkinson teaches an interface which an application program uses to manipulate compound documents, see Abstract. Consequently, independent claims 3, 28, and 39 are allowable over the cited combination of Crow and Atkinson.

Claims 4-5 and 7, 15, 18, 27-29, 38, 43-44, 48-49, 56-57, 59, 61, 67, 69, 75, 77 depend directly or indirectly from the aforementioned independent claims and are allowable as being dependent from an allowable claim.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action on pages 14-16, in section 9, rejects claims 8-9, 14, 19-20, 25, 31-32, 37, 40, 45, 54, 63-64, and 79-80 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 5,506,983 to Atkinson et al. and in further view of U.S. Patent No. 6,076,105 to Wolff et al. Applicant respectfully traverses this rejection.

Claims 8-9, 14, 19-20, 25, 31-32, 37, 40, 45, 54, 63-64, and 70 depend variously from independent claims 1, 3, 13, 28, 39, 58, 66 and 74 and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow and Atkinson do not teach or suggest the features of the rejected claims. Wolff et al. does not supplement Crow and Atkinson to teach or suggest these features. Wolff et al. describes a system and method for distributing processes sufficiently over a high speed network of multiple computer host at network attached shared storage. Wolff et al. does not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action on pages 16-20, in section 10, rejects claims 6, 10-11, 16-17, 21-22, 26, 30, 33-34, 41, 46, 50-52, and 55 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 5,506,983 to Atkinson et al. and in further view of U.S. Patent Application Publication No. 2002/0194484 to Bolonsky et al. Applicant respectfully traverses this rejection.

The rejected claims depend variously from the independent claims discussed above and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow and Atkinson do not teach or suggest the features of the rejected claims. Bolonsky et al. does not supplement Crow and Atkinson to teach or suggest these features. Bolonsky does not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action on pages 20-23, in section 11, rejects claims 12-13, 23-24, 35-36, 42, and 47 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,654,772 to Crow et al. in view of U.S. Patent No. 5,506,983 to Atkinson et al. and in further view of U.S. Patent No. 6,076,105 to Wolff et al. and in further view of U.S. Patent Application Publication No. 2002/0194484 to Bolonsky et al. Applicant respectfully traverses this rejection.

The rejected claims depend variously from the independent claims discussed above and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow and Atkinson do not teach or suggest the features of the rejected claims. Wolff et al. and Bolonsky et al. do not supplement Crow and Atkinson to teach or suggest these features. Wolff et al. and Bolonsky et al. do not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action on page 23, in section 12, rejects claims 63-64, 71-72, and 79-80 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No.6,654,772 to Crow et al. in view of U.S. Patent No. 6,076,105 to Wolff et al. Applicant respectfully traverses this rejection.

The rejected claims depend variously from the independent claims discussed above and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow does not teach or suggest the features of the rejected claims. Wolff et al. does not supplement Crow to teach or suggest these features. Wolff et al. describes a system and method for distributing processes sufficiently over a high speed network of multiple computer host at network attached shared storage. Wolff et al. does not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action on pages 23-24, in section 14, rejects claims 64, 72, and 80 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No.6,654,772 to Crow et al. in view of U.S. Patent Application Publication No. 2002/0194484 to Bolonsky et al. Applicant respectfully traverses this rejection.

The rejected claims depend variously from the independent claims discussed above and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow does not teach or suggest the features of the rejected claims. Bolonsky et al. does not supplement Crow to teach or suggest these features. Bolonsky does not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.

The Office Action on pages 24-25, in section 14, rejects claims 65, 73, and 81 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No.6,654,772 to Crow et al. in view of U.S.

Patent Application Publication No. 2002/0194484 to Bolonsky et al. and in further view of U.S. Patent No. 6,076,105 to Wolff et al. Applicant respectfully traverses this rejection.

The rejected claims depend variously from the independent claims discussed above and are patentable for at least the reasons discussed above regarding their base claims. As discussed above, Crow does not teach or suggest the features of the rejected claims. Wolff et al. and Bolonsky et al. do not supplement Crow to teach or suggest these features. Wolff et al. and Bolonsky et al. do not mention the claimed grouped storage, models and model directory.

In view of the above, Applicant respectfully requests that this rejection be withdrawn.


CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

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Respectfully submitted,

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